

Safety Data Sheet



Revision Date: 7/31/2014

SDS #: SDS-10284-02

SIGNALOCK™ HRP CHEMIWESTERN KIT (FILM)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

SIGNALOCK™ HRP CHEMIWESTERN KIT (FILM)

Product Code

54-53-00

Kit Components:

LumiGLO Reserve™ Chemiluminescent Substrate Solution A	54-69-02
SIGNALOCK™ BLOCKING SOLUTION	50-58-00
LumiGLO Reserve™ Chemiluminescent Substrate Solution B	54-70-02
20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)	50-63-03

Recommended Use Kit (See Attached Safety Data Sheets For Components Listed Above)

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755
Fax #: 1-301-948-0169
Web: www.kpl.com
Email: kplmsds@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER	Telephone: 13 11 26	Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone: (1) 613 996 6666	Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone: (44) 029 2041 6388	Hours: 09:00-17:00 GMT
USA- NATIONAL RESPONSE CENTER	Telephone: (1) 800 424 8802	Hours: 24 hours/day, 7 days/week

CHEMTREC:

CHEMTREC Customer Number:- CCN12505*
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN12505 or
+1 703-527-3887 (collect calls accepted)

Safety Data Sheet



Revision Date: 7/31/2014

SDS # SDS-10129-03

LumiGLO Reserve™ Chemiluminescent Substrate Solution A

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

LumiGLO Reserve™ Chemiluminescent Substrate Solution A

Product Code

54-69-00

54-69-02

54-69-01

SPL-LGR-A

Hazardous Reagent

LumiGLO Reserve™ Chemiluminescent Substrate Solution A

Hazardous Reagent Product code

Catalog No. listed above

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755

Fax #: 1-301-948-0169

Web: www.kpl.com

Email: kplmsds@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER	Telephone: 13 11 26	Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone: (1) 613 996 6666	Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone: (44) 029 2041 6388	Hours: 09:00-17:00 GMT
USA- NATIONAL RESPONSE CENTER	Telephone: (1) 800 424 8802	Hours: 24 hours/day, 7 days/week

CHEMTREC:

CHEMTREC Customer Number:- CCN12505*
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN12505 or
+1 703-527-3887 (collect calls accepted)

2. HAZARD IDENTIFICATION

Hazard Type

Health Hazard.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

GHS Classification

GHS Classification: Acute toxicity, Category 4, oral; H302 | Skin sensitisation, Category 2; H315 | Eye Irrit. 2: H319 | STOT SE 3: H335

Hazard Statements:

H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Precautionary Statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/eye protection/face protection.
P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.
 P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Symbols and Indications of Danger:

GHS07
 Warning



Principle Route of Exposure	The substance can be absorbed into the body through skin, eyes and ingestion.
Acute Effects: Eye:	May cause redness and irritation
Acute Effects: Skin:	Irritation may occur
Acute Effects: Inhalation:	Not Applicable
Acute Effects: Ingestion:	May cause Abdominal pain. Dizziness. Headache. Nausea. Vomiting
Chronic Effects:	Contains material which cause damage to the following organs: kidneys, Central Nervous System, liver, Reproductive System, skin and eyes.

Additional Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
LumiGLO Reserve™ Chemiluminescent Substrate Solution A	Proprietary Ingredient 1	<3%	Proprietary (Classified - see classification)
	Proprietary Ingredient 2	<3%	Proprietary (Not Classified)

GHS Classification GHS Classification: Acute toxicity, Category 4, oral; H302 | Skin sensitisation, Category 2; H315 | Eye Irrit. 2: H319 | STOT SE 3: H335

4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists
Oral Exposure	Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Rest. Refer for medical attention.
Inhalation Exposure	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If discomfort persists, obtain medical attention.
Skin Exposure	Flush with copious amounts of water. Wash contaminated clothing before reuse.
Eye Exposure	Flush with copious amounts of water or eyewash saline for at least 15 minutes

5. FIRE FIGHTING MEASURES

Extinguishing media	Dry Chemical extinguishers, water spray or foam.
Unusual Fire and Explosive Hazards	None special.

Flash Point	Not Available
Autoignition Temperature	Not Applicable
Flammability Statement	Not Flammable
Specific hazards arising from the chemical	Not Applicable
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing.
Environmental Precautions	No special environmental precautions required. Should not be released into the environment.
Method of Containment	Collect leaking and spilled liquid in sealable containers as far as possible.
Methods of Clean-up	Contain spill and then clean-up with copious amounts of water.
Other Information	Not Applicable

7. HANDLING AND STORAGE

Handling:	Handle in accordance with good industrial hygiene and safety practice.
Storage:	Store at 2 – 8°C. Keep lid closed tightly.

8. EXPOSURE CONTROL

Respiratory Protection	None required if good ventilation is maintained.
Eye Protection	Safety goggles.
Skin Protection	Industrial strength Neoprene or Nitrile chemical resistant glove. Laboratory apron or equivalent.
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to light pink, colorless, odorless liquid
Physical State	Liquid
Odor	None
Odor Threshold	Not Available
pH	9.35 - 9.85
Boiling Point	Not Available
Evaporation Rate	Not Available
Vapor Density	Not Available
Vapor Pressure	Not Available
Relative Density	Not Available
Auto-Ignition Temperature	Aqueous
Water Solubility	Not Available
Flammability	Not Flammable
Flash Point	Not Available
Viscosity	Not Available
Oxidizing Properties	Not an Oxidizer
Explosive Properties	Not an Explosive

Additional Parameters

Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to avoid	Protect from direct UV light, avoid elevated temperatures.
Incompatibility Materials to Avoid	Oxidizing agents, combustible materials, organic materials, acids, alkalis and metals.
Hazardous Decomposition Products	None Known
Hazardous Polymerization	Will not occur
Possibility of hazardous reactions	Not Applicable

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 Oral	Proprietary Ingredient 1: Acute Oral Toxicity (LD50): >3000 mg/kg [rat] Proprietary Ingredient 2: Acute Oral Toxicity (LD50): 4000 mg/kg [rat]
LD50 Dermal	Proprietary Ingredient 2: Acute Dermal Toxicity (LD50): 10626 mg/kg [rabbit]
LC50 Inhalation	Not Available

Chronic Toxicity

Carcinogenicity	Not Applicable
Irritation	Proprietary Ingredient 1: Skin: Moderate irritant [rabbit] Skin: Severe irritant [rabbit] Proprietary Ingredient 2: Eyes: Mild irritant [rabbit] Eyes: Moderate irritant [rabbit] Skin: Mild irritant [rabbit]

Corrosivity Not Available

Sensitization Not Available

Neurological Effects Not Available

Mutagenic Effects Not Available

Reproductive Effects Not Available

Developmental Effects Not Available

Target Organ Effects Kidneys, Central Nervous System, Liver, Reproductive System, Skin and Eyes.

Other adverse effects Contains materials which may cause damage to the following organs: Kidneys, Central Nervous System, Liver, Reproductive System, Skin and Eyes.

12. ECOLOGICAL MEASURES

Ecotoxicity	Not available.
Persistence/Degradability	Not available.
Mobility in Environmental Media	Not available.
Bioaccumulation/Accumulation	Not available.

13. DISPOSAL MEASURES

Waste Disposal Method: Observe all Federal, State, and Local laws concerning health and pollution.

Contaminated Packaging: Avoid contact with skin and clothing. Place contaminated packaging in a break proof outer vessel and dispose on in compliance with national and local regulations.

US EPA Waste Number: Not Available

14. TRANSPORTATION MEASURES

DOT: Not Regulated

IATA: Not Regulated

ADR (road)/ RID (rail): Not Regulated

IMDG (sea): Not Regulated

General Transport Regulations Not Available

15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

This product contains no chemical or chemicals which are subject to the reporting requirements of the Clean Air Act.

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals: Not Listed

State Right to Know Act

Chemical Name	Proprietary Ingredient
	1
Massachusetts	Listed
New Jersey	Listed
Pennsylvania	Listed
New York	Listed
Rhode Island	Listed

International Inventories

Chemical Name	Proprietary Ingredient 1
TSCA	Listed
DSL	Listed
NDSL	Not Listed
EINECS	Listed
CHINA	Listed
KECL	Listed
JAPAN:	Listed
AICS	Listed

EU Regulations

Annex I Index#	Not Available
Classification	GHS Classification: Acute toxicity, Category 4, oral; H302 Skin sensitisation, Category 2; H315 Eye Irrit. 2: H319 STOT SE 3: H335
Hazard Statements	H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation.
Precautionary Statements	P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P280: Wear protective gloves/eye protection/face protection. P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
Symbols and Indications of Danger	GHS07 Warning
Specific Concentration Limits	Not Available
Export and Import	Not Available
European Priority List	Not available

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.



Safety Data Sheet

Revision Date: 6/16/2015

SDS #: SDS-10130-04

LumiGLO Reserve™ Chemiluminescent Substrate Solution B

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

Product Code

LumiGLO Reserve™ Chemiluminescent Substrate Solution B (Sample)	SPL-LGR-B
LumiGLO Reserve™ Chemiluminescent Substrate Solution B	54-70-02
LumiGLO Reserve™ Chemiluminescent Substrate Solution B	54-70-01
LumiGLO Reserve™ Chemiluminescent Substrate Solution B	54-70-00

Hazardous Reagent

None

Hazardous Reagent Product code

Not Applicable

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755
Fax #: 1-301-948-0169
Web: www.kpl.com
Email: kplmsds@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER	Telephone: 13 11 26	Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone: (1) 613 996 6666	Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone: (44) 029 2041 6388	Hours: 09:00-17:00 GMT
USA- NATIONAL RESPONSE CENTER	Telephone: (1) 800 424 8802	Hours: 24 hours/day, 7 days/week

CHEMTREC: CHEMTREC Customer Number:- CCN12505*
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN12505 or
+1 703-527-3887 (collect calls accepted)

2. HAZARD IDENTIFICATION

Hazard Type	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS): The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment.
Principle Route of Exposure	The substance can be absorbed into the body by inhalation, through the skin and by ingestion.
Acute Effects: Eye:	May cause redness and irritation
Acute Effects: Skin:	May be absorbed. Dry skin. Redness.
Acute Effects: Inhalation:	Not Applicable
Acute Effects: Ingestion:	May cause nausea, vomiting and drowsiness
Chronic Effects:	Not Applicable

Additional Information The product contains no substances which at their given concentration, are considered to be hazardous to health.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
LumiGLO Reserve™ Chemiluminescent Substrate Solution B	Not Applicable	Not Applicable	Not Applicable
GHS Classification	Not Applicable: The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Regulation (EC) No 1272/2008		

4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists.
Oral Exposure	Rinse mouth
Inhalation Exposure	Fresh air, rest.
Skin Exposure	Clean skin with soap and water. Wash contaminated clothing before reuse.
Eye Exposure	Flush with copious amounts of water or eyewash saline for at least 15 minutes.

5. FIRE FIGHTING MEASURES

Extinguishing media	Dry Chemical extinguishers, water spray or foam.
Unusual Fire and Explosive Hazards	None special.
Flash Point	Not Available
Autoignition Temperature	Not Applicable
Flammability Statement	Not Flammable
Specific hazards arising from the chemical	Not Applicable
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing.
Environmental Precautions	No special environmental precautions required. Should not be released into the environment.
Method of Containment	Collect leaking and spilled liquid in sealable containers as far as possible.
Methods of Clean-up	Contain spill and then clean-up with copious amounts of water.
Other Information	Not Applicable

7. HANDLING AND STORAGE

SDS #: SDS-10130-04

Handling: Handle in accordance with good industrial hygiene and safety practice.

Storage: Store at 2 – 8°C. Keep lid closed tightly.

8. EXPOSURE CONTROL

Respiratory Protection	None required if good ventilation is maintained.
Eye Protection	Safety goggles.
Skin Protection	Industrial strength Neoprene or Nitrile chemical resistant glove. Laboratory apron or equivalent.
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless, odorless liquid
Physical State	Liquid
Odor	Odorless
Odor Threshold	Not Available
pH	Not Available
Boiling Point	Not Available
Evaporation Rate	Not Available
Vapor Density	Not Available
Vapor Pressure	Not Available
Relative Density	Not Available
Auto-Ignition Temperature	Not Available
Water Solubility	Not Available
Flammability	Not Available
Flash Point	Not Available
Viscosity	Not Available
Oxidizing Properties	Not Available
Explosive Properties	Not Available
Additional Parameters	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to avoid	Protect from direct UV light, avoid elevated temperatures.
Incompatibility Materials to Avoid	Oxidizing agents, combustible materials, organic materials, acids, alkalis and metals.
Hazardous Decomposition Products	None Known
Hazardous Polymerization	Will not occur
Possibility of hazardous reactions	Not Applicable

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 Oral	Not Available
LD50 Dermal	Not Available

SDS #: SDS-10130-04

LC50 Inhalation Not Available

Chronic Toxicity

Carcinogenicity Not Available

Irritation Not Available

Corrosivity Not Available

Sensitization Not Available

Neurological Effects Not Available

Mutagenic Effects Not Available

Reproductive Effects Not Available

Developmental Effects Not Available

Target Organ Effects Not Available

Other adverse effects Not Available

12. ECOLOGICAL MEASURES

Ecotoxicity Not Applicable

Persistence/Degradability Not Applicable

Mobility in Environmental Media Not Applicable

Bioaccumulation/Accumulation Not Applicable

13. DISPOSAL MEASURES**Waste Disposal Method:** Normal disposal with copious amounts of water. Observe all Federal, State and Local environmental regulations.**Contaminated Packaging:** Not Applicable**US EPA Waste Number:** Not Applicable**14. TRANSPORTATION MEASURES**

DOT: Not Available

IATA: Not Available

ADR (road)/ RID (rail): Not Available

IMDG (sea): Not Available

General Transport Regulations Not Applicable

15. REGULATORY MEASURES**This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

SDS #: SDS-10130-04

Not Available

State Regulations**California Proposition 65:**

This product contains the following Proposition 65 chemicals: Not Listed

State Right to Know Act**Chemical Name** Not Applicable**New Jersey** Not Applicable**Pennsylvania** Not Applicable**New York** Not Applicable**Rhode Island** Not Applicable**International Inventories****Chemical Name** Not Applicable**TSCA** Not Applicable**DSL** Not Applicable**NDSL** Not Applicable**EINECS** Not Applicable**CHINA** Not Applicable**KECL** Not Applicable**JAPAN:** Not Applicable**AICS** Not Applicable**EU Regulations****Annex I Index#** Not Applicable

Classification Not Applicable:
 The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per:
 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
 Regulation (EC) No 1272/2008

Risk Phrases Not Applicable**Safety Phrases** Not Applicable**Symbols and Indications of Danger** Not Applicable**Specific Concentration Limits** Not Applicable

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

Revision Date: 6/16/2015

Safety Data Sheet



Revision Date: 7/26/2014

SIGNALOCK™ BLOCKING SOLUTION

SDS #: SDS-10280-03

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
SIGNALOCK™ BLOCKING SOLUTION	50-58-00
SIGNALOCK™ BLOCKING SOLUTION	SPL-SL
SIGNALOCK™ BLOCKING SOLUTION	50-58-01

Hazardous Reagent
None

Hazardous Reagent Product code
None

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755
Fax #: 1-301-948-0169
Web: www.kpl.com
Email: kplmsds@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER	Telephone: 13 11 26	Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone: (1) 613 996 6666	Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone: (44) 029 2041 6388	Hours: 09:00-17:00 GMT
USA- NATIONAL RESPONSE CENTER	Telephone: (1) 800 424 8802	Hours: 24 hours/day, 7 days/week

CHEMTREC: CHEMTREC Customer Number:- CCN12505*
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN12505 or
+1 703-527-3887 (collect calls accepted)

2. HAZARD IDENTIFICATION

Hazard Type	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS): The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment.
Principle Route of Exposure	The substance can be absorbed into the body by inhalation, through the skin and by ingestion.
Acute Effects: Eye:	May cause redness and irritation
Acute Effects: Skin:	Absorption through skin may occur. May cause irritation to the skin
Acute Effects: Inhalation:	May cause irritation to the respiratory tract.
Acute Effects: Ingestion:	May be harmful if swallowed.
Chronic Effects:	
Additional Information	The product contains no substances which at their given concentration, are considered to be hazardous to health

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
SIGNALOCK™ BLOCKING SOLUTION	DISODIUM HYDROGEN PHOSPHATE	<1%	7558-79-4
GHS Classification	Not Available		

4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists
Oral Exposure	Rinse mouth. Refer for medical attention.
Inhalation Exposure	Remove subject to fresh air. Seek medical attention if necessary.
Skin Exposure	Flush skin with copious amounts of water.
Eye Exposure	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

5. FIRE FIGHTING MEASURES

Extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unusual Fire and Explosive Hazards	Not Available
Flash Point	Not Available
Autoignition Temperature	Not Available
Flammability Statement	Not Available
Specific hazards arising from the chemical	Not Available
Protective equipment and precautions for firefighters	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing. Avoid dust formation. Avoid breathing vapors, mist or gas.
Environmental Precautions	Data for 100% DISODIUM HYDROGEN PHOSPHATE : Endangerment of drinking water and environment: Maybe a hazard to drinking water sources when very large quantities get into groundwater. Inform the responsible authorities.
Method of Containment	Containment of spills requires no special equipment or procedures.
Methods of Clean-up	Clean up of spills requires no special equipment or procedures. Clean with copious amounts of water.
Other Information	Not Applicable

7. HANDLING AND STORAGE

Handling: Wear appropriate PPE.

Storage: Store at 2 - 25°C.

8. EXPOSURE CONTROL

Respiratory Protection Ventilation, local exhaust, or breathing protection

Eye Protection Safety goggles. Safety spectacles

Skin Protection Protective gloves. Protective clothing.

Ingestion Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear/Colorless- Pale Blue
Physical State	Liquid
Odor	Not Available
Odor Threshold	Not Available
pH	Not Available
Boiling Point	Not Available
Evaporation Rate	Not Available
Vapor Density	Not Available
Vapor Pressure	Not Available
Relative Density	Not Available
Auto-Ignition Temperature	Not Available
Water Solubility	Dilutable
Flammability	Not Available
Flash Point	Not Available
Viscosity	Not Available
Oxidizing Properties	Not Available
Explosive Properties	Not Available
Additional Parameters	See datasheet for other product information.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to avoid	Data for 100% DISODIUM HYDROGEN PHOSPHATE : The substance decomposes on heating producing toxic fumes. Reacts violently with strong acids .
Incompatibility Materials to Avoid	Not Available
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide
Hazardous Polymerization	Will not occur
Possibility of hazardous reactions	Data for 100% DISODIUM HYDROGEN PHOSPHATE : The substance decomposes on heating producing toxic fumes. Reacts violently with strong acids .

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

SDS #: SDS-10280-03

LD50 Oral	Data for 100% DISODIUM HYDROGEN PHOSPHATE : LD50 Rat >2000 mg/kg bw OECD Guide-line 401 "Acute Oral Toxicity" Source:BK Ladenburg, c/o Dr. W. Koch Ladenburg
LD50 Dermal	Not Available
LC50 Inhalation	Not Available
Chronic Toxicity	
Carcinogenicity	Not Available
Irritation	Data for 100% DISODIUM HYDROGEN PHOSPHATE : Mild Eye and Skin Irritation
Corrosivity	Not Available
Sensitization	Not Available
Neurological Effects	Not Available
Mutagenic Effects	Not Available
Reproductive Effects	Not Available
Developmental Effects	Not Available
Target Organ Effects	Not Available
Other adverse effects	Not Available

12. ECOLOGICAL MEASURES

Ecotoxicity	Not Available
Persistence/Degradability	Not Available
Mobility in Environmental Media	Not Available
Bioaccumulation/ Accumulation	Not Available

13. DISPOSAL MEASURES

Waste Disposal Method:	If there is no way of recycling it must be disposed of in compliance with the respective national and local regulations.
Contaminated Packaging:	Avoid contact with skin and clothing. Place contaminated packaging in a break proof outer vessel and dispose on in compliance with national and local regulations.
US EPA Waste Number:	Not Available

14. TRANSPORTATION MEASURES

DOT:	Not Available
IATA:	Not Available
ADR (road)/ RID (rail):	Not Available
IMDG (sea):	Not Available
General Transport Regulations	Not Available

15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).

SARA 313

SDS #: SDS-10280-03

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

This product contains no chemical or chemicals which are subject to the reporting requirements of the Clean Air Act.

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals:Not Listed

State Right to Know Act

Chemical Name	DISODIUM HYDROGEN PHOSPHATE
Massachusetts	Listed
New Jersey	Listed
Pennsylvania	Listed
New York	Listed
Rhode Island	Listed

International Inventories

Chemical Name	DISODIUM HYDROGEN PHOSPHATE
TSCA	Listed
DSL	Listed
NDSL	Not Listed
EINECS	Listed
CHINA	Listed
KECL	Listed
JAPAN:	Listed
AICS	Listed

EU Regulations

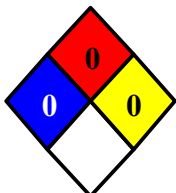
Annex I Index#	Not Available
Classification	Not Available
Risk Phrases	Not Available
Safety Phrases	Not Available
Symbols and Indications of Danger	Not Available
Specific Concentration Limits	Not Available
Export and Import	This substance is not listed in the Annex I of Regulation (EC) No 649/2012.
European Priority List	This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

Revision Date: 7/26/2014

Material Safety Data Sheet



Revision Date: 2/11/2011

MSDS #: 10133 50-63-00 50-63-01 50-63-03 20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)
50-63-04 50-63-19 SPL-WASH

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description

20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)

CATALOG NO.

50-63-00
50-63-01
50-63-03
50-63-04
50-63-19
SPL-WASH

Hazardous Reagent

None

Hazardous Reagent Product code

None

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755
Fax #: 1-301-948-0169
Web: www.kpl.com
Email: techserv@kpl.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER	Telephone: 13 11 26	Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone: (1) 613 996 6666	Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone: (44) 029 2041 6388	Hours: 09:00-17:00 GMT
USA- NATIONAL RESPONSE CENTER	Telephone: (1) 800 424 8802	Hours: 24 hours/day, 7 days/week

2. HAZARD IDENTIFICATION

Hazard Type	Not Hazardous
Principle Route of Exposure	Not Applicable
Acute Effects: Eye:	Not Applicable
Acute Effects: Skin:	Not Applicable
Acute Effects: Inhalation:	Not Applicable
Acute Effects: Ingestion:	Not Applicable
Chronic Effects:	Not Applicable

MSDS #: 10133	50-63-00	50-63-01	50-63-03	20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)
	50-63-04	50-63-19	SPL-WASH	
Additional Information	Not Applicable			

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)	N.A	N.A	N.A

4. FIRST AID MEASURES

General Advice	Not Applicable
Oral Exposure	Rinse mouth
Inhalation Exposure	Fresh air, rest.
Skin Exposure	with soap and water. Wash contaminated clothing before reuse.
Eye Exposure	Flush with copious amounts of water or eyewash saline for at least 15 minutes.

5. FIRE FIGHTING MEASURES

Extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unusual Fire and Explosive Hazards	Not Applicable
Flash Point	Not Applicable
Autoignition Temperature	Not Applicable
Flammability Statement	Not Applicable
Specific hazards arising from the chemical	Not Applicable
Protective equipment and precautions for firefighters	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing.
Environmental Precautions	Not Applicable
Method of Containment	Containment of spills requires no special equipment or procedures. Cover with absorbent.
Methods of Clean-up	Clean up of spills requires no special equipment or procedures. Clean with copious amounts of water.
Other Information	Not Applicable

MSDS #: 10133 50-63-00 50-63-01 50-63-03 20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)
50-63-04 50-63-19 SPL-WASH

7. HANDLING AND STORAGE

Handling: Wear appropriate PPE.

Storage: Store at 2 – 8°C.

8. EXPOSURE CONTROL

Respiratory Protection None required if good ventilation is maintained. Otherwise wear MSHA/NIOSH approved respirator suitable for vapor or mist concentrations encountered.

Eye Protection Safety spectacles.

Skin Protection Protective gloves. Protective clothing.

Ingestion Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Clear, Colorless Solution. Relatively free of particulate matter

Physical State Liquid

Odor Not Applicable

Odor Threshold Not Applicable

pH Not Applicable

Boiling Point Not Applicable

Evaporation Rate Not Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

Relative Density Not Applicable

Auto-Ignition Temperature Not Applicable

Water Solubility Dilutable

Flammability Not Applicable

Flash Point Not Applicable

Viscosity Not Applicable

Oxidizing Properties Not Applicable

Explosive Properties Not Applicable

Additional Parameters Not Available

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions

Conditions to avoid Not Available

Incompatibility Materials to Avoid Not Applicable

Hazardous Decomposition Products Not Applicable

Hazardous Polymerization Will not occur

MSDS #: 10133	50-63-00	50-63-01	50-63-03	20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)
	50-63-04	50-63-19	SPL-WASH	
Possibility of hazardous reactions		Not Applicable		

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 Oral	Not Applicable
LD50 Dermal	Not Applicable
LC50 Inhalation	Not Applicable

Chronic Toxicity

Carcinogenicity	Not Applicable
Irritation	Not Applicable
Corrosivity	Not Applicable
Sensitization	Not Applicable
Neurological Effects	Not Applicable
Mutagenic Effects	Not Applicable
Reproductive Effects	Not Applicable
Developmental Effects	Not Applicable
Target Organ Effects	Not Applicable
Other adverse effects	Not Applicable

12. ECOLOGICAL MEASURES

Ecotoxicity	Not Applicable
Persistence/Degradability	Not Applicable
Mobility in Environmental Media	Not Applicable
Bioaccumulation/Accumulation	Not Applicable

13. DISPOSAL MEASURES

Waste Disposal Method:	Normal disposal with copious amounts of water. Observe all Federal, State and Local environmental regulations.
Contaminated Packaging:	Not Applicable
US EPA Waste Number:	Not Applicable

14. TRANSPORTATION MEASURES

MSDS #: 10133	50-63-00	50-63-01	50-63-03	20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)
	50-63-04	50-63-19	SPL-WASH	
DOT:		Not Regulated		
IATA:		Not Regulated		
ADR (road)/ RID (rail):		Not Regulated		
IMDG (sea):		Not Regulated		
General Transport Regulations		Not Applicable		

15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 q 2.C1.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

N/A

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals: Not Listed

State Right to Know Act

Chemical Name	N.A
Massachusetts	Not Applicable
New Jersey	Not Applicable
Pennsylvania	Not Applicable
New York	Not Applicable
Rhode Island	Not Applicable

International Inventories

Chemical Name	N.A
TSCA	Not Applicable
DSL	Not Applicable
NDSL	Not Applicable
EINECS	Not Applicable
ELINCS	Not Applicable
CHINA	Not Applicable
KECL	Not Applicable
JAPAN:	Not Applicable
AICS	Not Applicable

EU Regulations

Annex I Index#

MSDS #: 10133	50-63-00	50-63-01	50-63-03	20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)
	50-63-04	50-63-19	SPL-WASH	
Classification		Not Applicable		
Risk Phrases		Not Applicable		
Safety Phrases		Not Applicable		
Symbols and Indications of Danger		Not Applicable		
Specific Concentration Limits		Not Applicable		
Export and Import		This substance is not listed in the Annex I of Regulation (EC) No 689/2008.		
European Priority List		This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).		

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.